

REMARKS

The claims in the application remain claims 1-27. Claims 1-4, 9-11, 13, 25-21 and 23 have been allowed. Claims 5-8, 12, 14, 22 and 24 have been rejected under 35 USC 112, second paragraph. Claims 25-27 have been rejected under 35 USC 102(b) or alternatively 35 USC 103.

Claims 5, 12, 14, 22 and 24 have been amended to overcome the above noted rejection. The proper Markush language is now in the claims. Accordingly said claims and those dependent thereon are seen to be allowable.

The rejection under 35 USC 102(b) or alternatively 35 USC 103 is respectfully traversed for the following reasons. First, it would be well to characterize the invention so as to put it into perspective with respect to the prior art. The “manufacture” as indicated in the claims is more fully explained at paragraph 0014 of the specification. It is explained there that the “process of manufacturing” to which this invention pertains is “known polymer manufacturing methods including extrusion, molding and equivalent methods.” Another important aspect of this invention is the way in which the “fluid” is employed in the manufacturing process. It is also stated at the above noted portion of the specification that the actual transfer of heat is performed by the “vaporized portion of the heat transfer fluid that is being used in conjunction with the manufacture of the temperature-sensitive polymers.”

Thus, the boiling point of the fluid is vitally important to the manufacturing process now claimed. Clearly, the boiling point of the fluid is therefore a defining part of the invention and fluids outside this boiling range, of whatever chemical structure, do not suggest the invention. It is also apparent to those of ordinary skill in the art that by

Application of: Brown, Jerry L.

Serial No.: 10/708,026

Amendment A

using the vapor rather than the liquid fluid to transfer the heat, there is a much more constant temperature delivered to the equipment used in the manufacturing process as denoted in the present specification and thus to the plastic involved. It removes the variation of the heat source heating the fluid, the heat loss from the heat source to the plastic and the heat loss regain to be attained in the fluid by the ultimate heat source. The boiling point of the composition is a constant and overcomes the problems of the prior art. Accordingly, as will be seen from a review of the prior art, no prior art has been cited that describes or suggests the presently claimed invention.

With respect to the prior art cited in the above noted rejections, it is seen that Broering et al., US 4,252,969 teaches a typical method of preparing plastic particles in a liquid heat transfer medium. While similar plastics are mentioned in the reference, there is no resemblance with respect to the "manufacturing process" as now intended in the claims and described in the specification. As is noted above, the boiling point of the heat transfer fluids of the invention are critical to the process as it is the vapor form of the composition that effects heat transfer to the tools involved in the "manufacturing process", i.e., extrusion, molding and equivalent methods.

In paragraph 0002 of the specification, particularly the last six (6) lines of the paragraph, the source of the advantage of the process of this invention is outlined. It is therein pointed out that a boiling point difference exceeding two (2) degrees centigrade can lead to a different crystallization behavior of the polymer in the extruded article. With this change, the article can exhibit modified bulk and surface characteristics. As is noted in paragraph 0002, the problem has been known for a long time with no completely satisfactory solutions. It is noted in paragraph 0008 of the specification that it is an

Application of: Brown, Jerry L.

Serial No.: 10/708,026

Amendment A

object of the present invention to provide a process with minimal temperature variation, even as low as within 1°C variation. Thus, products of the claimed process are improved over those of the prior art wherein extruded or molded plastics are manufactured with prior art methods such as liquid heat transfer fluids. Accordingly this reference does not teach or suggest the improved products now claimed in claims 25-27. The Examiner is therefore respectfully requested to withdraw the rejections under 35 USC 102(b) or 35 USC 103.

Similarly, Simon et all, US 5,736,621 does not teach or suggest the invention of claims 25-27. Such reference is even further away from the present invention than Broering et al. above. That is, a careful review of all examples in the reference reveals that all operate at the end well above the boiling point range now claimed. Some examples start at lower temperatures (240°C), but all end at much higher temperatures. Since the Simon et al. process, like Broering et al. above, is a liquid medium process, such high temperatures at the end are still above the boiling range now claimed.

Because the “process for manufacture” of the present invention is not related to polymer formation from a resin or monomer, the references cited do not teach or suggest the process now claimed nor the improved products obtained as claimed in claims 25-27. Accordingly, the Examiner is respectfully requested to withdraw the rejection under 35 USC 102(b) or alternatively 35 USC 103.

By the above amendments and remarks, the rejections noted by the Examiner have been overcome. Accordingly, an early allowance of all of the claims in the application is earnestly solicited.

Application of: Brown, Jerry L.

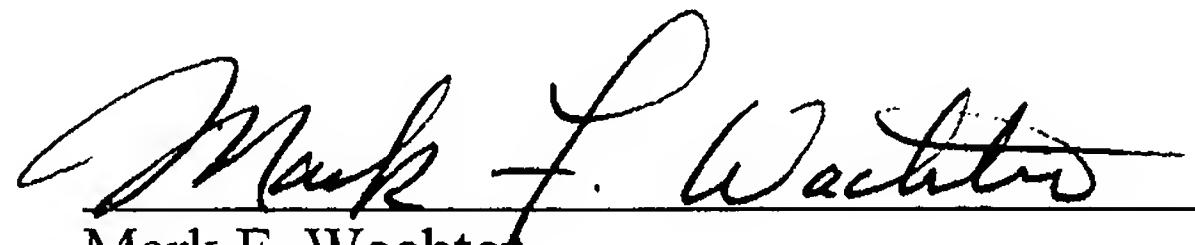
Serial No.: 10/708,026

Amendment A

If any issue regarding the allowability of any of the pending claims in the present application could be readily resolved, or if other action could be taken to further advance this application such as an Examiner's amendment, or if the Examiner should have any questions regarding the present amendment, it is respectfully requested that the Examiner please telephone Applicant's undersigned attorney in this regard.

Respectfully submitted,

Date: October 15, 2004



Mark F. Wachter

Reg. No. 27,243

Blackwell Sanders Peper Martin LLP

720 Olive Street, 24th Floor

St. Louis, Missouri 63101

(314) 345-6000

ATTORNEYS FOR APPLICANT